

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 3-19 are pending in this case.

In the outstanding Official Action, Claims 9 and 16 were rejected under 35 U.S.C. §103(a) as anticipated by Ishii (U.S. Patent No. 6,636,194). However, Claims 10-15 and 17-19 were objected to as being dependent on a rejected base claim, but otherwise were indicated as including allowable subject matter if re-written in independent form. Claims 3-8 are allowed.

Applicants gratefully acknowledge the allowance of Claims 3-8 and the indication that Claims 10-15 and 17-19 include allowable subject matter.

With regard to the rejection of Claim 9 under 35 U.S.C. §103(a) as unpatentable over Ishii, the rejection is respectfully traversed.

Claim 9 recites a display device comprising:

a data conversion unit for selecting a write voltage equivalent to any one of white and black represented by a tone level of a normal display area based on a threshold voltage, and converting the selected write voltage into a write voltage corresponding to any one of a brightest white display and a darkest black display in the pixel portion,

wherein normal display is carried out with the write voltage represented by the tone level of the normal display area, and static image display is carried out with the write voltage, which is held in the data memory portion and corresponds to any one of the brightest white display and the darkest black display in the pixel portion.

Ishii merely discloses that a data signal of a column data line 115-1 is written to a memory circuit 103, the data signal held in the memory circuit 103 is supplied to a liquid crystal pixel driver 104, and, according to a level of the supplied data signal, the liquid pixel

driver 104 supplies *either a first or a second voltage* to pixel electrode 106.¹ Thus, the pixel can only be set in a black or “on” mode and a white or “off” mode.

In contrast, the invention recited in Claim 9 includes “a data conversion unit for selecting a write voltage equivalent to any one of white and black represented by a tone level of a normal display area based on a threshold voltage.” The two mode “on/off” pixel setting described by Ishii does not include “a tone level” including multiple brightness levels of black and white. Consequently, it is respectfully submitted that Ishii does not teach or suggest selecting a tone level, as recited in Claim 9.

The outstanding Office Action cited column 6, lines 24-38 of Ishii as teaching “converting the selected write voltage into a write voltage corresponding to any one of a brightest white display and a darkest black display in the pixel portion.”² However, as stated above, Ishii only discloses that a first voltage or a second voltage is supplied based on a supplied data signal. It is respectfully submitted that there is no teaching or suggestion in Ishii that this data signal is a tone level, much less the tone level of a normal display. Thus, it is respectfully submitted that Ishii does not teach or suggest “converting the selected write voltage into a write voltage corresponding to any one of a brightest white display and a darkest black display in the pixel portion,” as further recited in Claim 9.

The outstanding Office Action further cites column 6, lines 54-60 of Ishii as teaching “wherein normal display is carried out with the write voltage represented by the tone level of the normal display area.”³ However, it is respectfully submitted that the cited portion of Ishii simply discusses that a memory circuit includes a data hold function. It does not teach or suggest the use of a normal display, where multiple brightness levels of white and black are displayed. Ishii only describes the use of a binary display. Accordingly, it is respectfully

¹See Ishii, column 7, lines 4-14.

²See Office Action dated August 11, 2004, page 2, paragraph 2.

³See Office Action dated August 11, 2004, page 2, paragraph 2.

Application No. 10/033,919
Reply to Office Action of August 11, 2004

submitted that Ishii does not teach or suggest carrying out normal display with the write voltage represented by the tone level of the normal display area, as recited in Claim 9.

Thus, since Ishii does not teach or suggest each and every element of Claim 9, Claim 9 is believed to be patentable over Ishii.

Claims 10-19 are dependent from Claim 9, with is believed to be patentable over the cited reference. Thus, Claims 10-19 are also patentable over the cited reference.

Accordingly, the outstanding rejection is traversed and the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Attorney of Record
Registration No. 28,870

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

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